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ABSTRACT

This manual provides information on and instructions for administering the Work Experience Survey (WES), a 30- to 60-minute structured interview methodology to help individuals with disabilities direct their own accommodation planning. Section 1 describes the WES, which consists of six sections: (1) background information on the respondent, (2) an accessibility checklist, (3) essential job functions checklist, (4) job mastery survey, (5) job satisfaction survey, and (6) accommodation plan. Section 2 reports on a demonstration of the WES with employees with multiple sclerosis, resulting in identification of job barriers, barrier removal, and increased job mastery and satisfaction. Section 3 discusses reasonable accommodation strategies and resources based on requirements of the Americans with Disabilities Act such as the restructuring of existing facilities, modification of work schedules, modification of equipment, and flexible personal leave policies. Sources of information are cited. Section 4 is on requesting reasonable accommodations, which is viewed as an employee-initiated collaborative process. Guidelines cover identifying career adjustment barriers, initiating requests for accommodation reviews, implementing reasonable accommodations with the cooperation of the employer, and administrative and legal resources. Appended are the WES survey form, case studies, and a list of resources. (Contains 28 references.) (DB)

The Work Experience Survey (WES) Manual

ED 403 691

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A Structured Interview for Identifying Barriers to Career Maintenance

A Service Provider's Guide

EC 305130

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Foreword

We would like to thank the National Multiple Sclerosis Society (New York, New York), its Indiana and Kentucky Chapters, and the many employed people with disabilities who assisted in developing the WES. Finally, we wish to acknowledge JoAnne Gottcent, of Work Able, Incorporated, in Evansville, Indiana, for her many contributions to WES research. For further information on the WES, contact the senior author at the Arkansas Research and Training Center in Vocational Rehabilitation.

A Service Provider's Guide

Section I: The Work Experience Survey (WES)

The *Service Provider's Guide* presents the Work Experience Survey or WES (see Appendix A). The WES is a structured interview protocol that enables people with disabilities who are employed or planning to be employed to direct their own accommodation planning. The purpose of accommodation planning is to enable the individual to identify and reduce or remove barriers to access to the job site and/or to productivity on the job. Administered in a face-to-face or telephone interview by a rehabilitation professional, the WES consists of the following six sections: (a) background information on the respondent, (b) accessibility checklist, (c) essential job functions checklist, (d) job mastery survey, (e) job satisfaction survey, and (f) accommodation plan. The *Guide* describes the WES and demonstrates its applications. Information is provided on accommodation strategies and on consultation resources as well.

By completing the WES with a rehabilitation professional, people with disabilities accomplish significant process and outcome goals. The process goals have to do with self-determination and empowerment as people participate in the identification and implementation of their own on-the-job accommodation strategies. The outcome goal is job retention, a result of central importance both to the WES participant and the rehabilitation professional.

The need for the WES is documented in recent statistics that illustrate the difficulty that employees with disabilities have in retaining and advancing on their jobs. Experts have repeatedly found the post-rehabilitation career profile of the typical client to be characterized by lateral movement from one entry-level job to another, often interspersed with extended periods of unemployment (Gibbs, 1990; Neubert, Tilson, & Ianacone, 1989; Roessler & Bolton, 1985). Perhaps most troubling, the United States General Accounting Office (1993) recently reported that

the mean income of successful rehabilitants two years after case closure dropped below their mean income at the time of entry into vocational rehabilitation.

WES Applications

The career maintenance and advancement difficulties experienced by persons with disabilities substantiate the need to use the WES in a wide variety of postemployment applications, for example, disability management programs, ADA consultation with employees and employers, and psychosocial services to counter the intrusiveness of severe disabilities. Each of these applications is described in more detail in the paragraphs to follow.

Using the WES in disability management. Data from the WES enable employers to improve the services of their disability management programs. Schwartz, Watson, Galvin, and Lipoff (1989, p. 1) defined disability management as the use of "services, people, and materials to (a) minimize the impact and cost of disability to employers and employees and (b) encourage return to work for employees with disability." Information from the WES helps employer and employee to collaborate in identifying cost-effective accommodations that have the potential to control rising disability costs which are consuming an increasing share of employer resources. Furthermore, the WES is as appropriate for older workers as it is for people with disabilities, an important point given the large number of older individuals in the labor force. Information from the WES also helps employers retain trained workers during a time when decreasing numbers of workers with adequate skills are available in the labor market (Hoyt, 1989).

Using the WES in responding to the ADA. Use of the WES is compatible with the intent of the ADA in that the WES provides information that enables people with disabilities to maintain productive vocational roles. But the ADA does more than simply place a value on employment; it requires accommodation of employees with a disabilities so that they can perform essential job functions, as

long as the accommodations do not constitute an undue hardship for the employer (Roessler & Rumrill, 1994). Data from the WES are useful throughout the process prescribed by the ADA to resolve problems that people with disabilities face in performing their jobs. Feldblum (1991) described the steps of the accommodation process as follows:

1. The employee or applicant may initiate the request for an accommodation to which the employer is required to respond.
2. The individual and the employer collaborate in a process of identifying the barriers that limit the worker's abilities to perform essential functions of the job.
3. Using the person with a disability as a source of information, the employer identifies a variety of accommodations.
4. The employer assesses the cost effectiveness of each of the accommodations to determine which ones can be made with the least economic hardship to the business.
5. The employer implements the most appropriate accommodation with due consideration of the person's preferences in the case of two or more accommodations deemed equal in cost effectiveness.

Information from the WES can help the employee understand specifically what his or her work limitations are, the priority to place on those limitations, and examples of reasonable accommodations. This information is useful throughout the five steps of the accommodation process. Moreover, the WES enables the employer to involve the person with a disability in the accommodation process as Feldblum suggested in step three.

Using the WES to respond to disability's intrusiveness. Finally, at a more general level, completing the WES enables respondents to gain greater control over the intrusiveness of illness and disability. In addition to their physical effects,

chronic illnesses and severe disabilities are intrusive psychosocial stressors that increase role strain, disrupt economic and vocational stability, and create a sense of helplessness and external control (Devins & Seland, 1987; Gecas, 1989). Through the WES interview, people with disabilities can assume leadership roles in the accommodation process. Hence, they gain a greater sense of self-efficacy, that is, the belief that they have the power to achieve desirable outcomes and avoid negative ones (Bandura, 1986). Experiences that enhance self-efficacy are desirable antidotes to the negative impact of disability and chronic illness on personal control.

Sections of the WES

By completing the WES, people with disabilities identify their on-the-job barriers to accessibility and productivity, formulate feasible solutions to those barriers, and prepare an accommodation plan. The accommodation plan describes how techniques such as job restructuring, worksite modification, and/or the addition of new technology would enable the person to maintain productivity. Barrier identification, solution generation, and accommodation planning are demonstrated in the WES sections to follow.

Assessing accessibility. Adapted from a checklist published by the President's Committee on Employment of People with Disabilities (1985), the accessibility section addresses barriers that the worker may experience in entering the worksite, using necessary services and facilities, and exiting in emergency situations (see Table 1). Should an accessibility issue not be in the checklist, a box is provided for the respondent to list any other accessibility problems. The final question asks the person to describe solutions for his or her two most important accessibility barriers.

Table 1
Assessing Accessibility

Section II. Accessibility: Check (✔) any problems you have getting to, from, or around on your job. List any other accessibility problems not included in the list. Describe solutions for your two most important accessibility barriers.

___Parking	___Bathrooms	___Temperature
___Public walks	___Water fountains	___Ventilation
___Passenger loading zones	___Public telephone	___Hazards
___Entrance	___Elevators	___Identification signs/labels
___Stairs/Steps	___Lighting	___Access to personnel offices
___Floors/Floor covering	___Warning devices	___Access to general use areas
___Seating/Tables	___Evacuation routes	

List any other accessibility problems:

#1.....

.....

#2.....

.....

Describe solutions for your two most important accessibility barriers.

#1.....

.....

#2.....

.....

Assessing essential job functions. Adapted from the RehabMatch program and Department of Labor research (Greenwood, Johnson, Wilson, & Schriner, 1988), the section on essential job functions is divided into six categories: physical abilities, cognitive abilities, task-related abilities, social abilities, working conditions, and company policies (see Table 2). This section enables the person to check any essential job functions or work conditions that constitute problems. The final question in the section asks the individual to describe two potentially helpful accommodations. These accommodations might involve one or more of the strategies suggested in Title I of the Americans with Disabilities Act (ADA), for example, restructuring of existing facilities, restructuring of the job, modification of work schedules, reassignment to other positions, modification of equipment, installation of new equipment, flexible personal leave policies, provision of qualified readers or interpreters, and modification of application and examination procedures.

Assessing job mastery. The job mastery scale (Coefficient Alpha = .74) was adapted from the Career Mastery Inventory developed by John Crites (1990). In addition to providing his permission for use of the items, Crites determined that the content of the items was appropriate for assessing job mastery concerns. The abbreviated measure includes items representing the six domains of the Career Mastery Inventory: getting the job done, fitting into the workforce, learning the ropes, getting along with others, getting ahead, and planning the next career step. At the close of the section, the respondent is asked to describe one solution for each of his or her top two priority job mastery concerns (see Table 3).

Assessing job satisfaction. The job satisfaction checklist (Coefficient Alpha = .78, see Table 4) was adapted from the Minnesota Theory of Work Adjustment developed by Dawis and Lofquist (1984). Respondents evaluate their satisfaction

Table 2
Assessing Essential Functions

Section III. Essential job functions: Check (✔) any essential job functions or conditions* that pose problems for you. Describe the two most important job modifications that you need, e.g., modifying existing equipment, adding new technology, or changing the type of work you do.

Physical Abilities
___Working 8 hours
___Standing all day
___Standing part of the time
___Walking for 8 hours
___Some kneeling
___Some stooping
___Some climbing
___Much pulling
___Much pushing
___Much talking
___Seeing well
___Hearing well
___Handling
___Raising arms above shoulders
___Using both hands
___Using both legs
___Using left hand
___Using right hand
___Using left leg
___Using right leg
___Lifting over 100 lbs.
___Lifting 51-100 lbs.
___Lifting 26-50 lbs.
___Lifting 11-25 lbs.
___Lifting 0-10 lbs.
___Prolonged sitting

Cognitive Abilities
___Immediate memory
___Short-term memory
___Long-term memory
___Judgment: safety
___Judgment: interpersonal
___Thought processing
___Reasoning
___Problem solving
___Planning
___Organizing

Task Related Abilities
___Repetitive work
___Work pace/sequencing
___Variety of duties
___Perform under stress/ deadlines
___Little feedback on performance
___Read written instructions
___Able and licensed to drive
___Attain precise standards/limits
___Follow specific instructions
___Writing
___Remembering
___Speaking/Communicating
___Initiating work activities
___Use telephone

Social Abilities
___Working alone
___Working around others
___Working with others
___Interacting with supervisors
___Supervising others
___Working with hostile others

Working Conditions
___Too hot
___Too cold
___Temperature changes
___Too wet
___Too humid
___Slippery surfaces
___Obstacles in path
___Dust
___Fumes
___Odors
___Noise
___Outdoors
___Sometimes outdoors
___Always inside

Company Policies
___Inflexible work schedules
___No accrual of sick leave
___Lack of flextime
___No "comp" time
___Inflexible job descriptions
___Vague job descriptions
___Infrequent reviews of job descriptions
___Rigid sick/vacation leave policies

Describe the two job modifications that would be most helpful to you, e.g., restructuring of the job, modification of work schedules, reassignment to another position, modification of equipment, or provision of readers and interpreters.

#1.....

#2.....

*Adapted from RehabMatch. Arkansas Research and Training Center in Vocational Rehabilitation.

Table 3
Assessing Job Mastery

Section IV. Job Mastery: Check (✓) any concerns* that affect your success in completing the following tasks. Describe one solution for each of your two most important concerns.

1. Getting the job done
   - ___Believing that others think I do a good job.
   - ___Understanding how my job fits into the "big picture," i.e., the meaning of my job.
   - ___Knowing what I need to know to do my job.
   - ___Having what I need to do my job (knowledge, tools, supplies, equipment).

2. Fitting into the workforce
   - ___Scheduling and planning my work ahead of time.
   - ___Working mostly because I like the job.
   - ___Doing a good job.
   - ___Willing to make changes when necessary.

3. Learning the ropes
   - ___Knowing who to go to if I need help.
   - ___Understanding company rules and regulations.
   - ___Knowing my way around work.
   - ___Feeling a "part" of what is going on at work.

4. Getting along with others
   - ___Eating lunch with friends at work.
   - ___Having many friends at work.
   - ___Looking forward to seeing my friends at work.
   - ___Knowing what is expected of me socially on the job.

5. Getting ahead
   - ___Having a plan for where I want to be in my job in the future.
   - ___Understanding what I have to do to get promoted.
   - ___Knowing what training to complete to improve chances for promotion.
   - ___Talking with supervisor about what I need to do to get promoted.

6. Planning the next career step
   - ___Considering what I will do in the future.
   - ___Knowing what the opportunities are in this company.
   - ___Wanting to become more specialized in my job.
   - ___Having a good idea of how to advance in this company.

Describe one solution for each of your two most important job mastery concerns.

#1.....

#2.....

*Selected items from the Career Mastery Inventory. Used with permission of the author, John O. Crites, Crites Career Consultants, Boulder, Colorado.

Table 4
Assessing Job Satisfaction

Section V. Satisfaction*: Rate your current job on each of the following statements. Describe two ways to make your job more personally satisfying.

In my job ... (check one)	Too Little	About Right	Too Much
I do things that make use of my abilities.	___	___	___
The job gives me a feeling of accomplishment.	___	___	___
I am busy all the time.	___	___	___
I can work alone on the job.	___	___	___
I do something different every day.	___	___	___
My pay compares well with that of other workers.	___	___	___
The job provides for steady employment.	___	___	___
The job has good working conditions.	___	___	___
The job provides an opportunity for advancement.	___	___	___
I get recognition for the work I do.	___	___	___
I tell people what to do.	___	___	___
I am "somebody" in the community.	___	___	___
My co-workers are easy to make friends with.	___	___	___
I can do the work without feeling it is morally wrong.	___	___	___
I can do things for other people.	___	___	___
The company administers its policies fairly.	___	___	___
My boss backs up the workers with top management.	___	___	___
My boss trains the workers well.	___	___	___
I try out some of my ideas.	___	___	___
I make decisions on my own.	___	___	___

Describe two ways to make your job more personally satisfying.

#1.....

#2.....

*Work reinforcers from the Minnesota Theory of Work Adjustment. Dawis, R. & Lofquist, L. (1984). A psychological theory of work adjustment. Minneapolis: University of Minnesota.

with their current jobs in terms of the 20 work reinforcers in the Minnesota theory. An example work reinforcer "I do things that make use of my abilities" may be responded to in one of three ways: (a) Too little, (b) About right, and (c) Too much. Respondents complete the section by listing two ways to make their jobs more personally satisfying. The changes identified may involve either decreasing or increasing the presence of a given reinforcer on the job.

Preparing an accommodation plan. To conclude the WES, respondents select their three highest priority barriers, suggest reasonable accommodations for those barriers, and indicate who can help and how they can help (see Table 5). The information collected for this section of the WES constitutes the essential elements of an accommodation plan that the person can share with the employer. In presenting information in the accommodation plan to the employer, the respondent should emphasize the relationship between barrier removal and increased productivity. Recommendations for approaching one's employer are presented in a subsequent part of this Guide.

In Appendix B, five case studies are presented that illustrate the type of information one can generate through use of the WES (Roessler & Gottcent, in press). The data in the case studies support the use of the WES as an intervention that contributes to the identification of barriers to productivity and to the generation of a wide range of accommodation strategies. The next section provides indepth comments on the administration of the WES.

Administering the WES

Rehabilitation professionals may administer the WES in a face-to-face (Roessler & Gottcent, in press) or telephone interview (Rumrill, Roessler, & Denny, 1993) with individuals with disabilities who are either employed or about to begin employment. Whether conducted by telephone or in person, the WES interview requires 30 to 60 minutes to complete.

Table 5
Developing an Accommodation Plan

Section VI. Review Sections II-V of the WES and list the three most significant barriers to success in your work. Describe their solutions and people/resources who can help. Be specific.

Barrier 1: _____

Solution? _____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Barrier 2: _____

Solution? _____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Barrier 3: _____

Solution? _____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Face-to-face contact enables the administrator to elicit more information from the respondent because it provides greater opportunity for feelings of trust to develop and for clarification of responses. Prior to administering the WES, rehabilitation professionals may wish to mentally "walk through" the interview using their own jobs as models.

The general procedure for completing WES Sections II through V is as follows:

1. Engage the person in identifying barriers to accessibility, performance of essential functions, job mastery, and job satisfaction.
2. Ask the person if any of his or her problems were overlooked, that is, not included in the checklist. If so, record the additional barriers in the appropriate section.
3. Encourage the person to suggest reasonable accommodations for the barriers; do not hesitate to share knowledge of accommodations that might prove feasible in the person's employment setting.
4. Help the person complete Section VI based on a thorough review of information in the preceding sections.
5. Remind the person that Section VI constitutes the basis for initiating a review of accommodation needs with the employer; it enables the person to state barriers to productivity in priority order as well as reasonable accommodation options for each barrier.

The WES administrator should make every effort to encourage respondents to elaborate on their impressions of their work environments, job duties, and barriers to their productivity. Such information is particularly useful when the rehabilitation professional is not familiar with the job that the person performs. For example, the WES administrator may not understand the details when a person states that he or she is an assembler. One respondent who worked on an

assembly line used an air gun to place coverboot wire around control panels on washing machines. Clearly, most WES administrators would need additional information to understand the demands of this task.

Respondents may also have difficulty discriminating between their job titles and their job duties. For example, a public school teacher needs to consider specific teaching functions and any barriers encountered in performing those functions. Essential functions of the teaching process include tasks such as reading, grading, talking/lecturing, writing, supervising children's activities, and attending faculty meetings. Even functions such as supervision and lecturing can be broken down into more specific tasks.

Throughout the administration of the WES, the interviewer should explain the meaning of any terms that are unfamiliar to the person. For example, cognitive items in the essential functions section may require clarification. Also, past respondents have questioned what temperature and ventilation have to do with accessibility. The interviewer should explain that excessive heat or cold or poor air circulation could influence one's breathing which, in turn, affects mobility.

Some respondents have also requested clarification in responding to the section on job satisfaction (Section V). The administrator should instruct respondents to consider all items in relationship to the concept of job satisfaction. For example, in presenting the item "I do something different every day," the administrator should ask, "Are you satisfied with this?" If he or she responds "yes," the correct answer is "about right." If the respondent says "no," the correct response would be one that indicates dissatisfaction, that is, "too little" or "too much." The interviewer must probe to determine whether the person does "too little" or "too much" of the same thing every day.

It is helpful to remind participants that the answers "too little" and "too much" are negative answers, that is, they indicate dissatisfaction with the availability of a

reinforcer. If the respondent is satisfied, the correct answer should be "about right." For example, "I tell peple what to do" could be answered by "too much" if the respondent has to do this frequently and does not like to do it. People who feel overworked should respond to the item "I am busy all of the time" with "too much." If they like the challenge of a busy job, they should answer "about right." If they feel they are not busy enough and would like to be busier, the answer is "too little."

Parts of the WES such as Sections II, III, and VI are helpful for individuals with disabilities who are not working but would like to work. Information in the WES can help them identify suitable types of jobs and work environments and the assistive devices/accommodations they might need. They can also consider community agencies, technology resources, and employer-based services that are available to assist them in resuming work. Using the WES for prospective employment is basically a "needs" assessment, e.g., how accessible would the work site have to be, how hot or cold would the work area have to be, could job duties involve walking long distances, what types of accommodations would be needed, and what resources are available.

The WES is also helpful for those individuals who have not disclosed their disabilities and have some discomfort about disclosure. The WES can help them focus on concrete information, involve them in constructive activities, and assist them in identifying appropriate people and agencies for resources. This type of focusing, and the resulting knowledge, may lessen their concerns about identifying their disabilities.

Section II: A Demonstration of the WES with Employees with Multiple Sclerosis

With an unemployment rate as high as 50% to 80% within 10 years of disease onset (Rao et al., 1991), people with multiple sclerosis (MS) are appropriate candidates for the WES. Research underscores the need to intervene at the worksite to remove barriers as soon as employees determine that their MS is affecting their performance (Gulick, 1991; Ketelaer, 1993; Kornblith et al., 1986). Jackson and Quaal (1991) placed barriers in the workplace in two categories: (a) access to the workplace and work environment and (b) ability to perform expected tasks (see Sections II and III of the WES). Prompt identification and removal of barriers in both categories (early intervention) helps to maintain the employee's feelings of job mastery and job satisfaction, thereby reducing the probability of job loss.

The Relationship of Barrier Identification and Removal to Job Retention

The rationale for using the WES with people with severe disabilities is based on recent research that demonstrated the relationship between the number of barriers to accessibility and performance of essential functions and a short form of an acceptance of MS scale and two variables that are predictors of job retention, job mastery and job satisfaction (Crites, 1990; Dawis & Lofquist, 1984; Roessler & Rumrill, in press). In a study of 50 employed adults with MS who completed the WES in either face-to-face interviews (n=34) or telephone interviews (n=16), Roessler and Rumrill (in press) reported that the total number of perceived barriers to accessibility and performance of essential functions correlated significantly with the number of problems in job mastery ($r=.34$, $p<.01$). Total number of barriers encountered was also directly related to level of job dissatisfaction. In other words, participants who experienced more barriers tended to report lower levels of job satisfaction ($r=-.50$, $p<.01$). The implication of these findings is that barrier removal

is related to increased job mastery and satisfaction, both of which are positive predictors of job retention.

Types of barriers. Information from the WES provided by the 50 employed adults with MS clarified the types of barriers to accessibility, performance of essential functions, job mastery, and job satisfaction that people with severe disabilities encounter. On the average, respondents reported 2.28 accessibility barriers in the workplace (Range 0-20, SD=2.22). The most frequently mentioned barriers were temperature of the worksite (47%), physical hazards (27%), entrance (22%), and stairs and steps (22%).

With regard to performance of essential functions, respondents listed a great many job demands that presented difficulties for them, that is, had the potential to threaten their job retention. On the average, they reported 11.96 problems (Range = 0-75, SD=9.21) with essential job functions which were distributed across the following areas: physical abilities, cognitive abilities, social abilities, task-related abilities, working conditions, and company policies. Participants reported significant problems with job demands that required physical abilities such as handling (45%), seeing well (34%), considerable walking (30%), working 8 hours (28%), standing part of the time (28%), standing all day (24%), using both legs (24%), using one's left hand (24%), and using one's right hand (24%). A significant number encountered difficulties with cognitive functions. The following percentages of the respondents had difficulties with thought processing (44%), immediate memory (40%), short-term memory (38%), and long-term memory (26%). A few respondents reported problems with job functions involving judgment (16%), problem solving (12%), organizing (10%), and planning (6%).

Although reporting very few difficulties using social abilities on the job (84% had no difficulties in this area), most of the respondents (64%) indicated problems with three or more task-related abilities. Many had difficulties with writing (48%),

remembering (48%), performance under stress or deadlines (42%), speaking/communicating (46%), repetitive work (24%), and work pace (24%). Forty-two percent of the respondents encountered two or more working conditions that were problematic with the most frequently mentioned problem being excessive heat in the workplace (38%). Most respondents had no problems with specific company policies such as "flex" time, "comp" time, or sick and vacation policies; 80% had either no problems or one problem related to specific company policies.

The findings supporting the relationship between perceived barriers and job mastery, and job satisfaction underscore the importance of barrier removal and, therefore, the importance of completing the WES. Removing barriers to accessibility and performance of essential functions via accommodations is related to a reduction in problems in job mastery and an increase in the level of job satisfaction. Fewer job mastery problems and higher levels of job satisfaction increase the probability of job retention. Hence, early intervention in the workplace with the WES is needed to identify barriers and implement reasonable accommodations.

Job satisfaction and barrier removal. Because barriers impair the worker's ability to perform adequately and to gain reinforcement from work, research on job satisfaction with people with disabilities supports early intervention focusing on barrier removal. Houser and Chace (1993) stated that job satisfaction is a direct function of the person's ability to get what he or she wants from work. Through barrier removal, rehabilitation professionals can increase individuals' capabilities to perform well and to get what they want from their jobs. Several authors have reported that utilization of accommodation strategies is one positive predictor of job retention (Gulick, 1991; Jackson & Quaal, 1991). Ketelaer (1993) found that, although people with MS lacked awareness of workplace accommodations, they were very interested in such information. Therefore, the *Service Provider's Guide*

is valuable to many employed people with disabilities because it introduces the WES as a means for identifying barriers and accommodations and, in the sections to follow, overviews accommodation strategies and resources. In the final section, the *Guide* recommends procedures for presenting accommodation needs to one's employer. Before moving to these sections, the reader is reminded of the underlying rationale for the WES: *Barrier reduction is related to increased job mastery and increased job satisfaction. Increased job mastery and job satisfaction improve the probability of job retention.*

Section III: Information on Reasonable Accommodation Strategies and Resources

Removing Employment Barriers

Research findings from the WES and employed persons with multiple sclerosis indicate a strong relationship between one's ability to gain access to the workplace and to perform essential job functions and feelings of job mastery and job satisfaction. Accordingly, the first application of the WES involves assisting the employee in identifying barriers to worksite accessibility and job performance. The second application should involve the employee in suggesting accommodations that would reduce or remove those barriers.

Title I (Employment) of the ADA requires most employers to participate in identifying and providing reasonable accommodations that enable qualified individuals with disabilities to do their jobs. Hence, use of the WES to identify accommodations to remove on-the-job barriers is consistent with the law of the land. Specifically, Title I of the ADA describes nine categories of reasonable accommodations: *restructuring of existing facilities, restructuring of the job, modification of work schedules, reassignment to another position, modification of equipment, installation of new equipment, provision of qualified readers and interpreters, modification of application and examination procedures*, and *flexible personal leave policies*. The paragraphs to follow provide descriptions and examples of each category; much of the material is based on the ADA Handbook and Technical Assistance Manual publications by the Equal Employment Opportunity Commission (1992) and the Department of Justice (1991).

Restructuring of existing facilities. One of the primary requirements of Title I is that the work environment must be accessible to persons with disabilities. All facilities that are or will be used by an employee or applicant with a disability must be reasonably modified to accommodate the person's individual needs. This does

not imply, however, that all facilities must be entirely accessible to all persons with disabilities. Title I regulations make it very clear that reasonable accommodations are to be considered on an individual, case-by-case basis. The following are examples of how existing facilities can be restructured to create accessible work environments:

- Installation of a wheelchair ramp at the entrance of a building
- Installation of an electric door opener
- Reservation of widened parking spaces for wheelchair users
- Renovation of restrooms
- Installation of flashing alarm systems for persons with hearing impairments
- Installation of hand rails and textured detectable warnings on stairways for persons with visual impairments

For additional information on restructuring existing facilities, employers, employees, and rehabilitation professionals can consult the Accessibility Guidelines and the Union Accessibility Guidelines. Both publications are available from local offices of the Equal Employment Opportunity Commission. Specific technical assistance information can be obtained from the Architectural and Transportation Compliance Board (see Resources section).

Restructuring of the job. A job may be restructured for an employee with a disability if the accommodation involves marginal functions. Job restructuring may include transferring certain tasks to another employee, assigning different tasks to the person with a disability, and eliminating tasks that the person with a disability cannot perform. For example, a marginal function of an administrative assistant's position might involve answering telephones for thirty minutes each day. A person who is deaf would be unable to perform that function which would require the employer to assign telephone duties to another employee. Job restructuring is an

effective and usually inexpensive means of accommodating an employee with a disability, but it is limited to the marginal or secondary responsibilities of the position. Essential functions, which should be specified in written job descriptions, are not subject to restructuring.

Modification of work schedules. Modified work schedules offer a reasonable accommodation that is usually inexpensive and often easy to arrange. This option includes both flexible (working the same number of hours on a different schedule) and reduced time assignments. The effects of a disability may seem to necessitate significant changes in an employee's schedule, but slight modifications can often yield impressive results. For example, a person with MS who encounters chronic fatigue has difficulty sustaining her physical stamina in the afternoon. Rather than reducing her schedule to mornings only, she might request an extended two-hour lunch period in which she could take a nap and regain her strength for the afternoon. She might then work an extra hour at the end of her shift to make up the time.

Reassignment to another position. In some cases, an accommodation is not possible for the employee's present position but would be feasible for another job. If the employer and employee agree that the other position would be more appropriate, they may consider reassignment to that position as an accommodation option. Reassignment may not be used to limit, segregate, or otherwise discriminate against the employee. The position should be vacant at the time of reassignment or expected to be vacant within a reasonable time frame. If the employee is qualified for the new position, it should be equivalent in pay and status to the previous job. If the employee is not qualified for reassignment to an equivalent-status position, the employer may reassign him or her to a lower-grade position.

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Modification of equipment. Unless associated costs constitute an undue hardship for the employer, employees with disabilities must have access to the equipment that is routinely used on their jobs. Often, existing equipment can be modified with slight expense and minor inconvenience. The following are three examples of modifications to existing equipment:

- A secretary with MS experiences numbness in her hands and has difficulty turning a dictation machine on and off. A foot pedal is installed to control the machine.
- A man with a hearing impairment works as a telemarketer but finds it difficult to use a telephone set at standard volume. His employer installs a voice amplifier inside the receiver.
- A woman with a visual impairment works as a computer programmer but finds it difficult to read the monitor. Her employer installs a software package that enlarges images on the screen.

Installation of new equipment. When existing equipment cannot be modified, the employer must consider new equipment that enables the employee to perform the essential functions of his or her job. The employer is only required, however, to provide equipment for that particular job, not equipment to be used outside of work in the person's daily life. As with all other types of reasonable accommodations, costs of new equipment must not constitute an undue hardship for the employer. The following are examples of new equipment accommodations:

- A man with severe arthritis has limited use of his hands. His job as a file clerk requires frequent access to files. His employer installs a swiveling "Lazy Susan" file cabinet to enable him to reach materials more easily.
- A woman with a visual impairment works as a newspaper editor. To assist her with the large volume of reading that is required, her employer provides a closed-circuit magnification machine.

Provision of qualified readers and interpreters. Readers and interpreters are often provided as reasonable accommodations for persons with visual and hearing impairments. Trained assistants facilitate access to written and spoken information, and they can serve a valuable function in enabling employees with disabilities to perform the essential functions of their jobs. Again, the undue hardship provision applies, and small employers may have difficulty providing personal assistance services on an ongoing basis. In most cases, however, readers and interpreters are only needed for a small portion of the day.

Modification of application and examination procedures and training materials. Title I requires that application and examination procedures and training materials be made accessible to people with disabilities based on individual need. Applications and examinations must assess the ability, not the limitations, of the individual to perform the position's essential functions. If the application process requires an examination, the employer must give advance notice so that the employee can request accommodations. Examination accommodations may include readers, scribes, extended time, a quiet environment, and elimination of sections that the applicant cannot complete due to disability.

If training/continuing education is offered, employers are required to make reasonable accommodations. Training accommodations may include accessible sites, modified formats for materials (e.g., Braille, large print, or simplified language), and modified administration of training (e.g., interpreters, readers, job coaches, or extended time).

Flexible personal leave policies. Flexible personal leave is considered a reasonable accommodation when an employee requires time off due to his or her disability. The employer may consider allowing the employee to use accrued leave, advance leave ("borrowing" from future accrued leave), and/or leave without pay. Flexible leave policies may be implemented to accommodate both the

employee's disability and his or her responsibility for family members (spouse or dependent children) who have disabilities.

Understanding the types of accommodations that are available to facilitate job retention will assist the WES respondent in applying information from the structured interview to the ADA's accommodation request process. Before that process begins, however, the interviewee should be informed of the numerous resources that support the integration and inclusion of individuals with disabilities.

Resources: Who Can Help Implement Reasonable Accommodations?

The Accommodation Plan (Section VI in the WES) asks the respondent to identify solutions and resources for his or her top-priority accommodation needs. Two national sources of technology and accommodation information are **ABLEDATA** and the Job Accommodation Network (**JAN**). **ABLEDATA** is located in Silver Spring, Maryland (8455 Colesville Road, Suite 935, 20910-3319; 800-227-0216) and provides specific information on technological devices such as their functions, costs, and suppliers. Housed at West Virginia University in Morgantown, **JAN** consults with private industry and individuals regarding job accommodations and technology (1-800-526-7234) and the Americans with Disabilities Act (1-800-232-9675). **JAN's** computer bulletin board (1-800-342-5526) contains current information on technology resources.

In addition to knowledge of accommodation resources, rehabilitation professionals need information on programs that provide legal assistance. The U.S. Equal Employment Opportunity Commission (EEOC, 1801 L Street, NW, Washington, D.C. 20507; 800-669-EEOC [voice], 800-800-3302 [TDD]) enforces Title I provisions prohibiting discrimination in employment and offers information, referrals to other sources, and technical assistance regarding Title I. The U.S. Department of Justice, Civil Rights Division (P.O. Box 66118, Washington, DC 20035-6118; 202-514-0301 [voice], 202-514-0381 [TDD]) enforces and provides

information on Titles II and III of the ADA which cover government services and public accommodations in commercial facilities. The Internal Revenue Service (1111 Constitution Avenue, NW, Washington, D.C. 20224; 800-829-3676 [voice], 800-829-4059 [TDD]) provides information to businesses and people with disabilities regarding tax credits, exemptions, and deductions.

Rehabilitation professionals should also encourage their clients to consult disability-specific advocacy groups for information on employment accommodations. Examples of these consumer organizations include the National Multiple Sclerosis Society (733 Third Avenue, New York, NY 10017; 212-986-3240), the American Council for the Blind (1155 15th Street, NW, Suite 720, Washington, D.C. 20005; 202-467-5081), the Association for Retarded Citizens (500 East Border Street, Suite 300, Arlington, TX 76010; 817-261-6003 [voice], 817-277-0553 [TDD]), the National Spinal Cord Injury Association (600 W. Cummings Park, Suite 2000, Woburn, MA 01801; 800-962-9629), and the Epilepsy Foundation of America (4351 Garden City Drive, Suite 406, Landover, MD 20785; 301-459-3700).

In addition to the resources described above, countless other Federal, national/private, and state agencies exist to assist with identifying and implementing employment accommodations. Rehabilitation professionals may wish to consult the resources presented in Appendix C (Equal Employment Opportunity Commission, 1992; Roessler & Rumrill, 1994).

Section IV: Requesting Reasonable Accommodations: An Employee-Initiated, Collaborative Process

Once employees have completed the WES interview and incorporated suggestions from rehabilitation professionals and other resources, they are ready to begin collaborative accommodation planning with their employers. During this cooperative process, people with disabilities have an important ally in Title I of the ADA. Title I (Employment) requires most public and private employers to provide reasonable accommodations that enable qualified individuals with disabilities to perform the essential functions of their jobs (Equal Employment Opportunity Commission & Department of Justice, 1991). The ADA not only guarantees people with disabilities the civil right to access employment opportunities, but it also requires considerable involvement of the individual with a disability in the accommodation process. Under Title I, the employee must (a) identify disability-related barriers that are thwarting job performance, (b) initiate a request with the employer for a review of his or her accommodation needs, and (c) implement, with the cooperation of the employer, reasonable accommodations. In other words, the accommodation process follows a "3-I" model: identify, initiate, and implement.

Identifying Career Adjustment Barriers

Before involving clients in the identification of barriers and possible solutions using the WES, the rehabilitation professional should clarify ADA provisions and define key Title I terms for the individual. For example, as of July 26, 1994, public and private employers with 15 or more employees are required to comply with the ADA. Title I prohibits employment discrimination against qualified people with disabilities and requires employers to provide reasonable accommodations so that these qualified people with disabilities can perform the essential functions of their jobs. Some of the key terms in Title I are disability, qualified, essential functions,

reasonable accommodations, and undue hardship (Equal Employment Opportunity Commission and Department of Justice, 1991):

Disability: A physical or mental impairment that substantially limits one or more major life activities such as walking, seeing, hearing, speaking, learning, or working.

Qualified: A qualified person with a disability is one who satisfies the primary requirements of the position and can perform essential functions of the job with or without reasonable accommodations.

Essential functions: Specified in a job description, essential job functions are those primary duties which the person must be capable of performing, with reasonable accommodations, if required.

Reasonable accommodations: Reasonable accommodations include modifications to a job or the work environment that enable a qualified person with a disability to perform essential job functions.

Undue hardship: An accommodation may be labeled an undue hardship if it costs more than alternatives that are equally effective, requires extensive and disruptive renovations, or negatively affects other employees or customers.

Having explained key terms in Title I to the person, the rehabilitation professional conducts the WES structured interview to facilitate the person's identification of his or her specific on-the-job accommodation needs. Steps in the identification phase are thoroughly described in the preceding sections of this manual.

Initiating Requests for Accommodation Reviews

Following identification of career adjustment barriers via the WES interview, the second "I" involves disclosing one's disability and requesting that the employer review the employee's accommodation needs. Mandating that most public and

private employers accommodate workers with disabilities, Title I of the ADA also requires considerable initiative on the part of the employee (Equal Employment Opportunity Commission & Department of Justice, 1991). For example, the Title I accommodation process begins when the employee discloses his or her disability and resulting accommodation needs. Until disclosure has been made, the employer is under no obligation to consider or provide accommodations. In fact, the ADA is so committed to individual privacy and consumer initiation that it precludes the employer from asking questions about disability on application forms or during job interviews. The employer may solicit disability-related information only after an official job offer has been made, and then only in reference to the performance of essential job functions. Disclosure of the disability, coupled with a request that the employer review the employee's career adjustment concerns, constitutes the initiation phase of the accommodation process. When disclosure and the request have been initiated, the employee is ready to implement reasonable accommodations with the cooperation of the employer.

Implementing Reasonable Accommodations with the Cooperation of the Employer

Following disclosure by the employee, Title I regulations prescribe a process of dialogue and collaboration in which the employer and employee consider, negotiate, and implement reasonable accommodations. As noted previously, Feldblum (1991) outlined the five-step process as follows:

- The employee initiates the request for an accommodation in written form.
- The employee and the employer collaborate in identifying the barriers that limit the employee's ability to perform essential job functions.
- Using the employee as a resource, the employer identifies a variety of accommodations that would help to reduce or remove career development barriers.

- The employer assesses the cost-effectiveness of each accommodation to determine which one(s) can be implemented with the least economic hardship.
- The employer implements the most appropriate accommodation, considering the employee's preferences when two equivalent accommodations have been identified.

These collaborative steps underscore the importance of effective communication between the employee and employer, and rehabilitation professionals should encourage their clients in the postemployment phase to enter the accommodation request process with a good-faith effort to emphasize the mutual benefits of reasonable accommodations. Reasonable accommodations improve job performance and reduce turnover, both of which have clear benefits to the employer. Moreover, the majority of employment accommodations cost nothing or very little to implement (Berkeley Planning Associates, 1982; Roessler & Gottcent, in press; Rumrill, 1993), and it is important for both parties to consider cost-benefit issues.

Once the accommodation is in place, the employee should monitor its effectiveness and inform the employer of its suitability. If the accommodation involves technology, the employee may need training in its use. Most importantly, the employee must determine whether the accommodation enables him or her to be more productive on the job. Following an appropriate amount of on-the-job experience, the employee should discuss the effectiveness of the accommodation with the employer.

Administrative and Legal Recourses

As the word "reasonable" implies, accommodations must not constitute an undue hardship for the employer. Hence, the employer makes the final decision as to which accommodations will and will not be provided. However, in the event that

the ADA's non-adversarial accommodation process breaks down and fails to result in mutually acceptable solutions, the employee does have administrative and legal recourses. Rehabilitation professionals should refer inquiries to the Equal Employment Opportunity Commission (complaints must be filed within 180 days of the discriminatory action), state human rights agencies, disability advocates, and/or attorneys if the employee believes that his or her employer is unwilling to provide reasonable accommodations. Remedies under Title I include hiring, reinstatement, punitive and compensatory damages, and court orders to stop discriminatory conduct.

Section V: Conclusion

In keeping with rehabilitation's commitment to provide responsive, comprehensive, and client-directed services for individuals with disabilities, practitioners must develop more effective strategies for promoting long-term career development following initial job placement. Developed as a postemployment intervention for adults with severe disabilities, the Work Experience Survey is an easy-to-administer interview that enables the respondent to identify his or her on-the-job barriers, propose reasonable suggestions for removing those barriers, and specify resources that can assist in implementing reasonable accommodations.

Although it comprises a powerful intervention in its own right, the WES is intended to be used as a vehicle for participation in a more elaborate intervention -- encouraging employees with disabilities to invoke their rights to accommodations under Title I of the Americans with Disabilities Act. The process begins with the WES, but it is most effectively accompanied by (a) detailed information about accommodation strategies; (b) introduction to resource agencies that can assist in implementing accommodations; and (c) instruction regarding the ADA's non-adversarial accommodation request procedure, cooperative communication strategies, and remedies for employer discrimination. By using the WES as an introduction to the process of identifying, appraising, and removing on-the-job barriers to career development, rehabilitation professionals can offer their clients a much needed postemployment service.

For additional information about the Work Experience Survey, Contact Richard T. Roessler, Ph.D., University Professor, Arkansas Research and Training Center in Vocational Rehabilitation, University of Arkansas, 346 North West Avenue, Fayetteville, AR 72701.

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Appendix A

Work Experience Survey (WES)

WORK EXPERIENCE SURVEY (WES)

Section I: Please provide information on your background, disability, and work experience.

Background

1. Age_____ 2. Sex_____ 3. Race_____ 4. Marital status_____

5. Number of years of education_____ 6. Highest educational degree completed_____

Disability

7. Disability of record (primary diagnosis)_____

8. How old were you when you acquired this disability? _____

9. What caused your disability? _____

10. Describe how the disability affects your functioning, e.g., decrease in muscle strength, chronic fatigue, limited visual field, poor balance, low stress tolerance. Rank order the entries in terms of their impact, e.g., the first effect listed represents the greatest problem.

    1. _____

    2. _____

    3. _____

    4. _____

    5. _____

Work Experience

11. Your current job title (the one used by your employer)_____

12. List three essential job functions that you perform regularly, e.g., take telephone messages, operate forklift, feed/care for livestock.

    _____

    _____

    _____

13. Name/address of company where you work_____

    Street address:_____

    City_____ State_____Zip code_____

14. Total number of years employed _____ 15. Number of months on current job_____

16. Number of hours working per week_____ 17. Weekly gross salary_____

Richard Roessler, Arkansas Research and Training Center, University of Arkansas, 1995.

Section II. Accessibility: Check (✔) any problems you have getting to, from, or around on your job. List any other accessibility problems not included in the list. Describe solutions for your two most important accessibility barriers.

___Parking	___Bathrooms	___Temperature
___Public walks	___Water fountains	___Ventilation
___Passenger loading zones	___Public telephone	___Hazards
___Entrance	___Elevators	___Identification signs/labels
___Stairs/Steps	___Lighting	___Access to personnel offices
___Floors/Floor covering	___Warning devices	___Access to general use areas
___Seating/Tables	___Evacuation routes	

List any other accessibility problems:

#1.....

.....

#2.....

.....

Describe solutions for your two most important accessibility barriers.

#1.....

.....

#2.....

.....

Richard Roessler, Arkansas Research and Training Center, University of Arkansas, 1995.

Section III. Essential job functions: Check (✔) any essential job functions or conditions* that pose problems for you. Describe the two most important job modifications that you need, e.g., modifying existing equipment, adding new technology, or changing the type of work you do.

Physical Abilities
___Working 8 hours
___Standing all day
___Standing part of the time
___Walking for 8 hours
___Some kneeling
___Some stooping
___Some climbing
___Much pulling
___Much pushing
___Much talking
___Seeing well
___Hearing well
___Handling
___Raising arms above shoulders
___Using both hands
___Using both legs
___Using left hand
___Using right hand
___Using left leg
___Using right leg
___Lifting over 100 lbs.
___Lifting 51-100 lbs.
___Lifting 26-50 lbs.
___Lifting 11-25 lbs.
___Lifting 0-10 lbs.
___Prolonged sitting

Cognitive Abilities
___Immediate memory
___Short-term memory
___Long-term memory
___Judgment: safety
___Judgment: interpersonal
___Thought processing
___Reasoning
___Problem solving
___Planning
___Organizing

Task Related Abilities
___Repetitive work
___Work pace/sequencing
___Variety of duties
___Perform under stress/ deadlines
___Little feedback on performance
___Read written instructions
___Able and licensed to drive
___Attain precise standards/limits
___Follow specific instructions
___Writing
___Remembering
___Speaking/Communicating
___Initiating work activities
___Use telephone

Social Abilities
___Working alone
___Working around others
___Working with others
___Interacting with supervisors
___Supervising others
___Working with hostile others

Working Conditions
___Too hot
___Too cold
___Temperature changes
___Too wet
___Too humid
___Slippery surfaces
___Obstacles in path
___Dust
___Fumes
___Odors
___Noise
___Outdoors
___Sometimes outdoors
___Always inside

Company Policies
___Inflexible work schedules
___No accrual of sick leave
___Lack of flextime
___No "comp" time
___Inflexible job descriptions
___Vague job descriptions
___Infrequent reviews of job descriptions
___Rigid sick/vacation leave policies

Describe the two job modifications that would be most helpful to you, e.g., restructuring of the job, modification of work schedules, reassignment to another position, modification of equipment, or provision of readers and interpreters.

#1.....

.....

#2.....

.....

*Adapted from RehabMatch. Arkansas Research and Training Center in Vocational Rehabilitation.

Section IV. Job Mastery: Check (✓) any concerns* that affect your success in completing the following tasks. Describe one solution for each of your two most important concerns.

1. Getting the job done
   - ___Believing that others think I do a good job.
   - ___Understanding how my job fits into the "big picture," i.e., the meaning of my job.
   - ___Knowing what I need to know to do my job.
   - ___Having what I need to do my job (knowledge, tools, supplies, equipment).

2. Fitting into the workforce
   - ___Scheduling and planning my work ahead of time.
   - ___Working mostly because I like the job.
   - ___Doing a good job.
   - ___Willing to make changes when necessary.

3. Learning the ropes
   - ___Knowing who to go to if I need help.
   - ___Understanding company rules and regulations.
   - ___Knowing my way around work.
   - ___Feeling a "part" of what is going on at work.

4. Getting along with others
   - ___Eating lunch with friends at work.
   - ___Having many friends at work.
   - ___Looking forward to seeing my friends at work.
   - ___Knowing what is expected of me socially on the job.

5. Getting ahead
   - ___Having a plan for where I want to be in my job in the future.
   - ___Understanding what I have to do to get promoted.
   - ___Knowing what training to complete to improve chances for promotion.
   - ___Talking with supervisor about what I need to do to get promoted.

6. Planning the next career step
   - ___Considering what I will do in the future.
   - ___Knowing what the opportunities are in this company.
   - ___Wanting to become more specialized in my job.
   - ___Having a good idea of how to advance in this company.

Describe one solution for each of your two most important job mastery concerns.

#1.....

.....

#2.....

.....

*Selected items from the Career Mastery Inventory. Used with permission of the author, John O. Crites, Crites Career Consultants, Boulder, Colorado.

Richard Roessler, Arkansas Research and Training Center, University of Arkansas, 1995.

Section V. Satisfaction*: Rate your current job on each of the following statements. Describe two ways to make your job more personally satisfying.

In my job ... (check one)	Too Little	About Right	Too Much
I do things that make use of my abilities.	___	___	___
The job gives me a feeling of accomplishment.	___	___	___
I am busy all the time.	___	___	___
I can work alone on the job.	___	___	___
I do something different every day.	___	___	___
My pay compares well with that of other workers.	___	___	___
The job provides for steady employment.	___	___	___
The job has good working conditions.	___	___	___
The job provides an opportunity for advancement.	___	___	___
I get recognition for the work I do.	___	___	___
I tell people what to do.	___	___	___
I am "somebody" in the community.	___	___	___
My co-workers are easy to make friends with.	___	___	___
I can do the work without feeling it is morally wrong.	___	___	___
I can do things for other people.	___	___	___
The company administers its policies fairly.	___	___	___
My boss backs up the workers with top management.	___	___	___
My boss trains the workers well.	___	___	___
I try out some of my ideas.	___	___	___
I make decisions on my own.	___	___	___

Describe two ways to make your job more personally satisfying.

#1.....

.....

#2.....

.....

*Work reinforcers from the Minnesota Theory of Work Adjustment. Dawis, R. & Lofquist, L. (1984). A psychological theory of work adjustment. Minneapolis: University of Minnesota.

Richard Roessler, Arkansas Research and Training Center, University of Arkansas, 1995.

Section VI. Review Sections II-V of the WES and list the three most significant barriers to success in your work. Describe their solutions and people/resources who can help. Be specific.

Barrier 1: _____

Solution? _____

_____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Barrier 2: _____

Solution? _____

_____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Barrier 3: _____

Solution? _____

_____

_____

_____

Who can help? How can they help? _____

_____

_____

_____

Richard Roessler, Arkansas Research and Training Center, University of Arkansas, 1995.

Appendix B

Case Studies

Case Studies[1]

Results of WES interviews with five adults coping with multiple sclerosis are described in the case studies to follow. The case studies specify the types of work limitations caused by multiple sclerosis and the accommodations needed in the four areas of the WES: accessibility, essential job functions, job mastery, and job satisfaction.

Case 1. The first case is that of a 38 year old white female who acquired MS at age 37. A college graduate, she works as a professional educator who is responsible for developing and conducting continuing education courses for business and industry. Responsible for supervising a staff of 12 people, she has worked in her present job for 10 years. Her symptoms include problems with (a) fine motor coordination, (b) balance and coordination, (c) spasticity in both legs, and (d) dizziness and vertigo.

Accessibility problems in her place of work are considerable. Entrance to and movement about the building constitute problems due to stairs/steps and types of floor covering. Access is limited for general use areas such as bathrooms, water fountains, public telephones, and personnel offices. She is also concerned about evacuation from the building under emergency conditions.

Due to MS, she is experiencing difficulties with certain essential job duties that require standing part of the time, talking, and using arms and legs. Problems with fine motor coordination affect her ability to write and turn book pages. Indicating problems with functions such as remembering, communicating, and working at a fast pace, decrements in functioning were noted in almost every area of the cognitive ability checklist.

She noted no problems in the job mastery section, indicative of confidence in her ability to perform satisfactorily given proper work conditions. Two areas of

job dissatisfaction were singled out; she would like (a) more time to develop course materials, and (b) salary parity with similar positions.

She requested several types of reasonable accommodations, beginning with accessibility in the workplace which requires a response from her employer. Accommodations requested for problematic job demands are easily accomplished. To prompt her memory, she plans to take notes and to repeat names during introductions. A small dictating machine will assist with memory and handwriting barriers. Finally, recognizing her need for a regular schedule and adequate rest, she will ask family members to share more household chores so that she can rest more in the evenings and on the weekends.

Case 2. Case 2 is a 47 year old white female who acquired MS at age 28. She completed 23 years of education in order to become a medical professional, a job she has held for 6 years in the same clinic. Her MS symptoms affect balance and walking, and she has experienced bouts of blurred vision.

Office accessibility is not a problem at the present time. The clinic is on the first floor and general use areas are accessible. She did, however, note limitations in use of her right hand and both legs that affect her ability to perform job functions such as case recording and patient examinations. She also mentioned problems with long-term memory and two concerns in the areas of career advancement and job satisfaction that were unrelated to her MS.

At the present time, she needs three types of reasonable accommodations: (a) an adjustable stool in each of the examination rooms so that she can sit part of the time, (b) a small dictating machine for recording her medical observations, and (c) regular work hours limited to an 8 to 10 hour work day. Her experience with MS has also taught her the value of the holistic approach to treating physical and neurological conditions.

Case 3. Case 3 is a 47 year old white male who acquired MS at age 33. He has 16 years of education and 28 years of full-time work experience in agriculture. He works 60 hours a week and performs functions such as caring for livestock, repairing and servicing agricultural equipment, and overseeing farm operations. In addition to visual and emotional effects, his present MS symptoms include numbness in his hands and feet and weakness in his legs causing inability to walk and stand at times. Factors that have caused him to leave work include severe drops in energy and the numbness in his hands and feet.

Accessibility problems included access to silos and grain bins and any other areas with stairs and steps. He also noted problems with hazards, for example, charging animals, lack of ventilation, and excess heat. He expects that the physical demands of farming will exceed his ability to make accommodations. In the essential job functions section, he checked accommodation needs for almost all of the 24 physical abilities. He also noted problems with the majority of the items in the task-related abilities and working conditions sections.

In the job mastery section, he expressed concern about his ability to "carry my own weight on the job." He does not want others to see him as unable to do quality work. He wishes to do his share of the work and be a part of day-to-day farm operations. He enjoys farming and has no job satisfaction problems. To accommodate his MS, he is beginning to make plans to alter his career. He may lease part of his farm and work a smaller section. He may lease the entire operation with the stipulation that he may continue to work on a flex-time schedule. Finally, he may change jobs and work in an indoor, sedentary position as a business manager for a tire distributor.

Case 4. Case 4 is a 44 year old white male who was diagnosed as having MS within the past year. He has 20 years of education and has worked for 21 years as a public school teacher. Citing fatigue as his most severe symptom, he

has experienced walking limitations and hand/wrist weakness. Several accessibility problems result from his mobility limitations and chronic fatigue. He encounters problems with stairs and steps and slippery floor coverings. General use areas with bathrooms, water fountains, and public telephones are not fully accessible. Walking from the parking lot and entering the building, gymnasium, teachers' work room, and swimming pool constitute problems.

At the present time, he identified problems with essential functions such as standing (lecturing) and handling (grading papers). He also noted some cognitive limitations in the area of short-term memory, writing, and performing under stress of deadlines. In the area of job mastery, he desires that others view him as a person who can do a good job. He is also unsure of whom to approach for help with his accommodation needs. He finds his work very satisfying and wishes to continue as a teacher.

He has many practical suggestions for accommodating limitations related to MS. First, he noted the need to decrease mobility requirements. For example, he would prefer to stay in his room during the preparation and lunch periods. He is willing to negotiate other responsibilities in lieu of assignments such as supervising commencements and student assemblies which require considerable walking and climbing. A system of student runners would help as would a room assignment near the faculty restrooms and parking lot. He uses a stool during classroom instruction and would like to have a small microwave range and refrigerator in his room.

Case 5. Case 5 is a 51 year old white female who acquired MS at age 36. She has 17 years of education and has worked as a nurse for 28 years. She presently works 20 hours a week as an after-hours nurse assisting with appointments, medical procedures, and paperwork. In addition to MS, she has

osteoarthritis of the spine, and the two conditions have resulted in muscular weakness, chronic fatigue, back pain, and lack of sensitivity in her hands.

Accessibility problems, current and projected, include parking that is too far from the office and an entrance door that is difficult to open. She is worried about climbing down one flight of stairs to exit the building in case of an emergency. Her accommodation needs center on both physical and cognitive job requirements. Duties requiring standing, stooping, kneeling, and lifting can be difficult. She has experienced some short and long-term memory problems as well as occasional visual problems (blurred vision) that have affected her performance with paperwork assignments.

Related to career mastery, she wants people to consider her a capable employee who does not use her MS as an excuse. She desires to exercise more control over her schedule and activities at work. Wishing to advance in her career, she is currently enrolled in further education. She is seeking a job that will provide greater access to ability utilization, sense of accomplishment, adequate compensation, opportunity for advancement, and personal autonomy.

Reasonable accommodation for this woman involves completion of her education and employment in a more responsible position. She is interested in moving into the insurance division owned by her current employer in order to hold a position with increased management responsibilities and decreased physical demands. She needs to work on the first floor, avoid tasks requiring standing and lifting, and have electronic entrance doors. Note-taking has helped to resolve paperwork problems, and she has learned to ask others for help in lifting patients. Regularly scheduled times for resting and eating during the work day (standard breaks and lunch period) are also important issues.

[1]Excerpted from Roessler, R. & Gottcent, J. (in press). The Work Experience Survey: A reasonable accommodation/career development strategy. Journal of Applied Rehabilitation Counseling.

Appendix C

Selected Resources

Selected Resources

Federal	Address
The President's Committee on Employment of People with Disabilities	1331 F Street, NW Washington, D.C. 20004 202-376-6200
Architectural and Transportation Barriers Compliance Board	1111 18th Street, NW, Suite 501 Washington, D.C. 20036-3894 800-USA-ABLE (voice/TDD)
National Institute on Disability and Rehabilitation Research	400 Maryland Avenue, SW Washington, D.C. 20202-2572 202-732-5801 (voice), 202-732-5316 (TDD)
ADA Clearinghouse and Resource Center National Center for State Courts	300 Newport Avenue Williamsburg, VA 23185 804-253-2000
Clearinghouse on Disability Information Office of Special Education & Rehabilitation Services U.S. Department of Education	Switzer Building, Room 3232 Washington, D.C. 20202-2524 202-732-1723 (voice/TDD)
Job Training Partnership Act (JTPA) Programs Office of Job Training Programs U.S. Department of Labor	200 Constitution Avenue, NW, Rm. N4709 Washington, D.C. 20210 202-535-0580
Social Security Administration	6401 Security Boulevard Baltimore, MD 21202 800-772-1213
State Vocational Rehabilitation Services Program Rehabilitation Services Administration Office of Special Education & Rehabilitative Services U.S. Department of Education	Switzer Building 300 C Street, SW, Room 3127 Washington, D.C. 20202-2531 202-732-1282 (voice/TDD)
U.S. Employment Service Employment and Training Administration Department of Labor	200 Constitution Avenue, NW Washington, D.C. 20210 202-535-0189
U.S. Department of Health and Human Services Office for Civil Rights	330 Independence Avenue, SW Washington, D.C. 20201 202-619-0403 (voice) 202-863-0101 (TDD)
National/Private	
Accent on Information	P.O. Box 700 Bloomington, IL 309-378-2961
Alexander Graham Bell Association for the Deaf	3417 Volta Place, N.W. Washington, D.C. 20007-2778 202-337-5220

American Foundation for the Blind National Technology Center (AFB/NTC)	15 West 16th Street New York, NY 10011 800-232-5463
Center for Computer Assistance to the Disabled (C-CAD)	617 Seventh Avenue Fort Worth, TX 76104 817-870-9082
Center for Rehabilitation Technology (CRT)	Georgia Institute of Technology College of Architecture Atlanta, GA 30332-0156
Gazette International Networking Institute (GIN)	4502 Maryland Avenue St. Louis, MO 63103 314-361-0475
Heath Resource Center	One DuPont Circle #800 Washington, D.C. 20036-1193 800--544-3284
IBM National Support Center for Persons with Disabilities	P.O. Box 2150 Atlanta, GA 30055
American Speech-Language-Hearing Association	10801 Rockville Pike Rockville, MD 20852 301-897-5700
Disability Rights Education and Defense Fund	2212 Sixth Street Berkeley, CA 94710 800-466-4ADA
Foundation on Employment and Disability	3820 Del Amo Boulevard, #201 Torrance, CA 90503 213-214-3430
Ability Magazine Jobs Information Business Service	1682 Langley Irvine, CA 92714 714-854-8700
American Association for the Advancement of Science Project on Science, Technology, and Disability	1333 H Street, NW Washington, D.C. 20005 202-326-6630 (voice/TDD)
American Bar Association Commission on Mental & Physical Disability Law	1800 M Street, NW Washington, D.C. 20036 202-331-2240
The Association for Persons in Supported Employment	5001 West Broad Street, Suite 34 Richmond, VA 23230 804-282-3655
Direct Link for the Disabled	P.O. Box 1036 Solvang, CA 93464 805-688-1603

Gallaudet University National Information Center on Deafness	Kendall Green 800 Florida Avenue, NE Washington, D.C. 20002 202-651-5051
Goodwill Industries of America, Inc.	9200 Wisconsin Avenue Bethesda, MD 20814-3896 301-530-6500
National Center on Employment of the Deaf National Technical Institute for the Deaf Rochester Institute of Technology	One Lomb Memorial Drive P.O. Box 9887 Rochester, NY 14623-0887 716-475-6834
National Clearinghouse of Rehabilitation Training Materials	Oklahoma State University 816 West 6th Street Stillwater, OK 74078 405-624-7650
National Easter Seal Society	70 East Lake Street Chicago, IL 60601 312-726-6200
National Head Injury Foundation, Inc.	1140 Connecticut Avenue, NW, Suite 812 Washington, D.C. 20036 202-296-6443
National Organization on Disability	910 16th Street, NW, Room 600 Washington, D.C. 20006 1-800-248-ABLE
National Rehabilitation Association	1910 Association Drive, Suite 205 Reston, VA 22091 703-715-9090
United Cerebral Palsy Associations, Inc.	1522 K Street, NW Washington, D.C. 20005 800-872-5827 (voice/TDD)
Vocational Evaluation & Work Adjustment Assoc. Div. of the National Rehabilitation Association	1910 Association Drive, Suite 205 Reston, VA 22091 703-636-9306
World Institute on Disability	510 16th Street Oakland, CA 94612 415-736-4100

State

Governor's Committee on Employment of People with Disabilities	Division of Rehabilitation Service P.O. Box 11586 Montgomery, AL 36111-0586 205-281-8780
Assistive Technology of Alaska	Division of Vocational Rehabilitation 400 D Street, Suite 230 Anchorage, AK 99501 907-274-0138

Arkansas Department of Human Services	Division of Rehabilitation Services Increasing Capabilities Access Network 2201 Brookwood Drive, Suite 117 Little Rock, AR 72202 501-666-8868 (voice/TDD) in-state 800-828-2799
Rocky Mountain Resource and Training Institute	6355 Ward Road, Suite 310 Arvada, CO 80004 303-420-2942 (voice/TDD)
University of Delaware	Center of Applied Science & Engineering New Castle County Newark, DE 19716 302-651-6830 (voice), 302-651-6834 (TDD)
Georgia Department of Human Resources	Division of Rehabilitation Services 878 Peachtree Street, NE, Room 702 Atlanta, GA 30309 404-853-9151
Department of Human Services	Vocational Rehabilitation & Services for the Blind Division 1000 Bishop Street, Room 605 Honolulu, HI 96813 808-586-5368
Illinois Assistive Technology Project	411 East Adams Street Springfield, IL 62701-1404 217-522-7985 (voice/TDD)
Family and Social Services Administration	Division of Aging & Rehabilitative Services 402 West Washington St., Room W-453 Indianapolis, IN 46207-7083 317-233-3394
Iowa Program for Assistive Technology	Iowa University Affiliated Program University Hospital School Iowa City, IA 52242 319-356-4391 (voice/TDD)
Kentucky Assistive Technology Services Network	KATS Network Coordinating Center 427 Versailles Road Frankfort, KY 40601 502-564-4655 (voice/TDD)
Louisiana State Planning Council on Developmental Disabilities	Department of Health and Hospitals P.O. Box 3455 Baton Rouge, LA 70821-3455 504-342-6804
Division of Special Education	Maine Department of Education State House Station #23 August, ME 04333 207-289-5950

Maryland Technology Assistance Project	Governor's Office for Handicapped Individuals 300 West Lexington Street 1 Market Center-Box 10 Baltimore, MD 21201-3435 410-333-4975
Deputy Commissioner for Policy and Programs	Commission on the Deaf & Hard of Hearing 600 Washington Street, Room 600 Boston, MA 02111 617-727-5106
Minnesota Star Program	300 Centennial Building 658 Cedar Street St. Paul, MN 55155 612-297-1554
Division of Rehabilitation Services	300 Caspers Avenue Jackson, MS 39203 601-354-6891
University of Missouri	Institute for Human Development Kansas City, MO 64110 816-235-1770
Montana Department of Social & Rehabilitation Services	111 Sanders P.O. Box 4210 Helena, MT 59604 406-444-2590
Assistive Technology Project	Nebraska Department of Education Division of Rehabilitative Services P.O. Box 94987 Lincoln, NE 68509-4987 402-471-0735
Program Development	Rehabilitation Division, PRPD 505 East King Street, Room 502 Carson City, NV 89710 702-687-4452
Department of Education	State of New Hampshire Concord, NH 03824 603-362-4320
New Mexico TAP	Division of Vocational Rehabilitation 604 West San Mateo Santa FE, NM 87505 505-827-3533
NY State Office of Advocate for the Disabled TRAID Project	One Empire State Plaza, 10th Floor Albany, NY 12223-0001 518-474-2825
NC Assistive Technology Project	Div. of Vocational Rehabilitation Services 1110 Navaho Drive, Suite 101 Raleigh, NC 27609 919-850-2787

Department of Human Resources	Vocational Rehabilitation Division Technology Access for Life Needs 2045 Silverton Road, NE Salem, OR 97310 503-378-3850
Vocational Rehabilitation Department	P.O. Box 15 West Columbia, SC 29171-0015 803-822-5303
Technology Access Project	Dept. of Mental Health & Mental Retardation 3rd Floor, Doctor's Bldg. 706 Church Street Nashville, TN 37243-0675 615-741-7441
Assistive Technology Program	Utah State Univesity Developmental Center for Persons with Disabilities Logan, UT 84322-6855 801-750-1982
Assistive Technology Project	Dept. of Aging and Disabilities Agency of Human Services 103 South Main Street Waterbury, VT 05676 802-241-05676
Assistive Technology System	Dept. of Rehabilitative Services P.O. Box 11045 Richmond, VA 23230 804-367-0315
WisTech	Div. of Vocational Rehabilitation 1 West Wilson Street, Room 950 P.O. Box 7852 Madison, WI 53702 608-266-1281

Additional Copies

64–1701 ..... WES Manual
64–1702 ..... WES Survey Form (Pkg. of 50)

MATERIALS DEVELOPMENT AND
DISSEMINATION CENTER

A Component of the
Arkansas Research & Training Center in Vocational Rehabilitation
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